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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/837,483 | 04/19/2001 | Hiroynki Oka | K-1973 | 9920 |

7590 08/15/2003
KANESAKA AND TAKEUCHI
1423 Powhatan Street
Alexandria, VA 22314

EXAMINER

KING, BRADLEY T

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| ART UNIT | PAPER NUMBER |
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3683

DATE MAILED: 08/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,483

Applicant(s)

OKA ET AL.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 4-9, 12, 19 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-11, 13-18, 20, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 9-11, 13-18, 20, and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "a pump which is driven by the service braking maneuver". It is unclear how the pump is driven by a service brake maneuver.

Claim 1 recites "controlling, in the service braking maneuver, a discharge pressure of said pump according to the operational conditions of the service braking and the another braking different from the service braking". It is unclear how the operational conditions of a different braking are considered during the service braking maneuver, particularly when the another braking is different from the service braking.

Claim 1 recites "to become substantially same even in different braking conditions by the service braking and the another braking". The meaning of this limitation is not clear. It is also unclear what constitutes "different braking conditions".

Claim 16 recites "the input". There is insufficient antecedent basis for this limitation in the claims.

Claim 16 recites "said servo ratio is set smaller than the service ratio normally used for the service braking". The servo ratio of the elected embodiment appears to be

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fixed. This limitation renders the claim indefinite as it appears to define the ratio in terms of what would normally be used in other braking systems.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 9-11, 13-15, 18 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Siebert et al (US# 4730877).

Siebert et al disclose all the limitations of the instant claims including: a master cylinder 1 having an input shaft which travels according to travel of an operational member 22 for a service braking maneuver, a master cylinder pressure chamber (18-19), and a master cylinder piston (23-24) which develops master cylinder pressure in the master cylinder pressure chamber according to the travel of the input shaft (the structure is inherent to master cylinders), a pump 10 which is driven by the service braking maneuver, a brake force control device which receives operational conditions of the service braking and another braking different from the service braking, the braking force control device controlling, in the service braking maneuver, a discharge pressure of the pump according to the operational conditions of the service braking and the another braking different from the service braking, and a travel modulating device 37

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which modulates the travel of the operational member in the service braking maneuver to become substantially same even in different braking conditions by the service braking and the another braking by using the discharge pressure of the pump controlled by the brake force control device.

Regarding claims 10-11, Siebert et al disclose a modulating piston 38 having different diameter piston portions.

Regarding claim 13, Siebert et al disclose biasing means 39.

Regarding claim 14, Siebert et al disclose metal seals (interpreted in light of the instant disclosure) on both piston portions.

Regarding 15, see column 3, lines 13-20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 9-11, 13-15, 20 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa et al (US#6231134) in view of Seibert et al (US#4730877).

Fukasawa et al disclose a braking system including; a master cylinder 68 having an input shaft which travels according to travel of an operational member 76 for a service braking maneuver, a master cylinder pressure chamber (72-74), and a master cylinder piston which develops master cylinder pressure in the master cylinder pressure chamber according to the travel of the input shaft (the structure is inherent to master cylinders), a pump 85 which is driven by the service braking maneuver, a brake force control device 46 which receives operational conditions of the service braking and another braking (regenerative) different from the service braking, the braking force control device controlling, in the service braking maneuver, a discharge pressure of the pump according to the operational conditions of the service braking and the another braking different from the service braking, and a travel modulating device 228 which modulates the travel of the operational member. Fukasawa et al lack the control of the travel modulator by the discharge pressure of the pump, instead showing one with a biasing spring. Seibert et al disclose a similar braking system and further teach a travel modulating device 37 controlled by the discharge pressure of a pump. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the travel modulator of Seibert et al in the system of Fukasawa et al to reduce the size and manufacturing efforts (see column 1, lines 60-65 of Seibert et al).

Regarding claim 20, see column 4, lines 8-10.

Response to Arguments

Applicant's arguments filed 4/24/03 have been fully considered but they are not persuasive. Regarding Seibert et al, the reference discloses wheel skid control braking (column 3, lines 40-45) which reads upon "another braking" as broadly recited. Also note the 112 2nd rejections above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

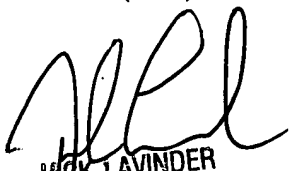
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

BTK
August 10, 2003


JACK LAVINDER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600